

II. REMARKS

The Office Action dated December 9, 1996 has been carefully reviewed. In response thereto, claims 2-18 have been amended. New claims 19-22 have been added, so that claims 2-22 remain active in the application. No new matter is added by the claim amendments or the new claims.

Claims 4-17 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Claim 17 stands rejected under 35 U.S.C. § 112, first and second paragraphs. Claims 2-18 stand rejected under 35 U.S.C. § 102. Claims 2-18 stand rejected under the judicially created doctrine of non-obviousness non-statutory double patenting over the patented claims in U.S. Patents 4,694,490; 4,704,725; 4,965,825; and 5,109,414. Claims 2-16 stand rejected under the judicially created doctrine of double patenting over the claims of copending U.S. application 08/113,329 and related U.S. applications numbered 1-327 in the Office Action, Paper No. 7 (p. 13-15), mailed on December 9, 1996.

Regarding paragraph 2 of the Office Action, the present application claims priority under 35 U.S.C. § 120 of the following applications:

<u>Serial No.</u>	<u>Filing Date</u>	<u>Patent No.</u>
08/113,329	August 30, 1993	Pending
08/056,501	May 3, 1993	5,335,277
07/849,226	March 10, 1992	5,233,654
07/588,126	September 25, 1990	5,109,414
07/096,096	September 11, 1987	4,965,825

Consequently, the Applicants will demonstrate disclosure only with respect to the "87

case", App. Ser. No. 07/096,096 and issued as U.S. Pat. No. 4,965,825.

In their 1987 continuation-in-part specification, applicants disclose "an integrated system of programming communication" which encompasses many inventions and deliberately includes many embodiments. Their teaching technique is to introduce the principles of their integrated system in a series of *related* examples. Each example builds upon structure and principles introduced earlier. Examining basic principles in detail in early examples, enables the specification with concreteness to expand and extend the scope of the teaching in later examples.

Starting with "**One Combined Medium**" on page 19 which focuses on the creation and delivery of a receiver specific graph in a broadcast or cablecast television program, "Wall Street Week," the specification introduces concepts of personalization of mass media and broadcast control of receiver station computing equipment. At page 28 *et seq.* it describes apparatus that include signal processors and signal decoders and introduces the concept of a signal processor *system*. At page 40 *et seq.* it teaches the composition of signal information and the organization of message streams.

Then in a series of four **examples, #1 through #4** which begin on pages 108, 143, 162, and 197 respectively, the specification demonstrates how receiver stations communicate signal processor apparatus and methods ("SPAM") processor code and data of the integrated system of programming communication to *some* apparatus they actuate, how decryption occurs, how metering and monitoring take place, and how actuated apparatus perform. Each example builds on concepts introduced earlier in the specification to provide a detailed teaching of its own subject matter, and a particularly

important teaching occurs from pages 156 through 162 where the specification teaches the structure and operating capabilities of a *controller of a decoder*.

Building on all that precedes it, **example #5**, which begins on page 248, then relates how the integrated system processes a multichannel communications system, which conveys different types of signals, in order to monitor programming availability and enable receiver station apparatus to receive desired programming.

From pages 278 through 312, in **example #6** and especially **example #7**, which includes both digital and analog television signals and relates to the "Wall Street Week" program (and which has further disclosure at pages 427 through 447), the specification teaches regulating reception and use of programming of the integrated system of programming communication.

At page 312 *et seq.* it relates further monitoring concepts.

From page 324 through page 390 the specification teaches a series of transmitter station and transmitter network concepts. This portion of the specification also relies on all previous disclosure in that special attention is given to intermediate transmission stations which, *as receiver stations*, respond to programming transmissions of the integrated system as well as storing, organizing, generating, and transmitting programming. At page 340 *et seq.* **example #8** teaches distribution to, storage and organization at, and retransmission from intermediate transmission stations ("ITS") of SPAM programming -- most specifically television spot commercials. At page 354 *et seq.* **example #9** teaches automating intermediate transmission station combined medium operations by describing how an intermediate transmission station responds to

an intermediate generation set and other elements of the integrated system to generate processor code and data and transmit the code and data with SPAM programming -- spot commercial unit Q of example #8 -- all of which are subsequently shown in the specification to operate at receiver stations to deliver receiver specific programming at video monitors, speakers, printers, and transmitters (telephones which communicate to remote data collection stations). At page 374 *et seq.* example #10 extends the transmitter and network automating concepts of examples #8 and #9 by disclosing *a plurality* of intermediate transmission stations generating processor code and data, in the fashion of example #9, and inserting different code and data into a *network originated* transmission of SPAM programming -- again the unit Q television spot commercial.

From page 390 through 516, the specification discloses further ultimate receiver station ("URS") automation concepts, including regulating the URS environment (page 396 *et seq.*), controlling multiple receivers and output devices to present coordinated output (page 406 *et seq.*), receiving selected programming of the integrated system (page 419 *et seq.*), certain *integrated system computer system concepts* (page 427 *et seq.*), whose **example #7** (page 427 *et seq.*) description relies on the receiving selected programming concepts of pages 419-427. At page 447 *et seq.* the specification discloses certain data maintenance, timing control, efficiency, and other concepts involved in controlling combined media operations. At page 457 *et seq.* the specification discloses certain timing, imaging, communication, and transmission processing concepts that relate to efficient delivery of integrated system programming. At page 463 *et seq.* the specification relates to user specific audio, print, and other combined media besides

receiver specific video. With all this preparation, the specification teaches, from page 469 through page 516, the combined media presentation of **examples #9 and #10** at a plurality of ultimate receiver station (which are responding to signals sent by different intermediate transmission stations). At page 516 *et seq.* the specification discloses enhancing and extending functionality of the integrated system by reprogramming receiver apparatus and enabling receiver stations to process transmissions having new forms of composition.

Finally, at page 533 *et seq.* the specification discloses "**Summary Example**" (#11) which teaches a very large scale integrated data processing and communications problem and its solution(s), using *all of* the disclosed integrated system with iterative broadcasting, response, and refinement.

Because of the integrated nature of the disclosure, no part of the specification is intended to be considered *in isolation*. However, with regard to the present application, the invention is disclosed, among other places, in examples #9, #10 and #11. For example, processing subscriber data to generate a benefit datum, delivering information content and the benefit datum at receiver stations, inputting a subscriber reaction, and using a signal to control the receiver stations based on the subscriber reaction is disclosed from page 469, line 1 through page 476, line 7. Pages 490 through 508 and pages 549 through 552 disclose the processing of subscriber data to generate benefit datum. Examples of subscriber data are family taste preferences (e.g. "Mild version Quick"), subscriber specific values (e.g. 1,071.32), subscriber addresses (e.g. 111 First St.), and farmer's specific data (MY_FARM.DAT). Examples of generated benefit datum

are a savings of 46 percent for one subscriber (p. 492) and the four commercial spots that are of a particular possible highest potential value to a particular farmer (p. 551). Inputting a subscriber reaction to delivered information content and benefit datum is disclosed in pages 507 through 509, at page 555 and at page 428, lines 6-35. The last citation describes a scenario in which the subscriber reaction is station-specific-television-program-selection-and-display instructions that are in response to the transmission of specific programming. Generating a control signal that controls the receiver station based on the subscriber's reaction and controlling the receiver station accordingly is disclosed in pages 509 through 511. The communication of subscriber station information from a subscriber station to a remote station or remote site is disclosed in pages 549 through 555 and at page 472, lines 23-27 (meter information is sent to a remote site, see example #3). The foregoing is intended to be exemplary only and in no way to limit the claimed invention to the cited passages.

Claims 4-17 stand rejected under 35 U.S.C. § 112, second paragraph as being indefinite. Applicants believe that the rejection is traversed by the amendments that clarify said claims. Applicants further submit that said claims are sufficiently definite to particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

The amendment to claim 4 has removed recitation of "a benefit." Claim 5 has been amended to indicate that the second recitation of "at least one remote station" refers to the "at least one remote station" first recited in the preamble. Claim 5 has been

amended to remove recitation of "said processing." Claim 6 has been amended to confirm that the recitation of "a transmitter" in the body of the claim refers to the at least one origination transmitter that was first recited in the preamble. Claim 9 has been amended to confirm that the "transmitter" of step (4) in the body of the claim refers to the transmitter that was first recited in the body of the claim in step (2). Claim 12 has been amended to clarify the antecedent basis of "a receiver," "a transmitter," and "a signal." Claim 13 has been amended to confirm the antecedent basis of "a transmitter," "a signal," and "signals." Claim 16, as amended, clarifies that "a signal" found in the limitation "a signal location" refers to a location in an information transmission for signals in general, rather than referring to a location in an information transmission in which the previously recited "said at least one first control signal" is located. Claims 12, 13 and 16 have been amended to clarify the import of each recitation of "signal" or "signals."

Regarding the recitation of "signal" and "signals" in claims 12, 13 and 16, reference to the drawings has been requested by the examiner. Claims 12 and 13 introduce a switch. Examples of a switch are found in Figure 6A, reference characters 75 and 73; Figure 3A, reference characters 39I and 39J; and Figure 7, reference character 259. For the following examples, specific reference is made to Figure 6A, matrix switch 75. For claims 12 and 13, examples of any "third control signal," "instruct signal," "second control signals," or "selected signal" that is "effective at the transmitter station" or communicated "to said transmitter" are those signals input to matrix switch 75. For claims 12 and 13, examples of the instruct signal and second control signals that are

communicated "from a selected signal source" are those signals input to matrix switch 75 from video recorder & player 76 or distribution amplifier 63. The second control signals may also be input to the computer. For claim 12, examples of the instruct signal and the second control signals that are communicated to the memory or recorder are those signals input to video recorder & player 76 or recorder 78 from matrix switch 75. For claim 13, examples of third control signals, which are input to the controller and are effective to control the switch, are those signals input to cable program controller & computer 73. For claim 16, examples of the information transmission, which has a signal location wherein the second control signals and the instruct signal may be transmitted in order to be detected by a receiver station, are the programming transmissions that are received via satellite earth station 250, satellite receiver circuitry 251, converter boxes 201, 202, antennas 298, 299, and other input apparatus 252 and input to matrix switch 259 in Figure 7. Thus, there are three signal types in the relevant claims; an instruct signal, which may be embedded and is effective to control at least one of a plurality of receiver stations to generate a first control signal based on a subscriber reaction to a recommendation or offer; second control signals, which may be embedded, address the instruct signal to a processor of the at least one receiver, identify receiver stations and control a switch, computer or controller; and a third control signal, which controls a computer, controller or switch to communicate at least one of the instruct signal and the second control signals.

Claim 17 stand rejected under 35 U.S.C. § 112, first and second paragraphs.

Applicants believe the rejection is traversed by the amendments that clarify said claim.

Applicants further submit that the subject matter of claim 17 is adequately disclosed and fully enabled by the disclosure of the '87 case such that one of ordinary skill in the art would be able to recognize and make or use the claimed invention. Accordingly, no new matter is presented.

Applicants respectfully submit that one of ordinary skill in the art would comprehend the meaning of the term "prompting" in claim 17 per its ordinary use to mean "encouraging" or "soliciting" or "initiating". Although the examiner states that the '87 case did not disclose the term "promoting" and questions the term's meaning as used in claim 17, Applicants are unable to find any recitations of the term "promoting" in claim 17 as originally filed or as amended.

Examples #9, #10 and #11 and Figures 7 and 7F of the '87 case relate to an interactive method for combined medium programming delivery for use with an interactive mass medium program output apparatus. Outputting a mass medium program that presents a recommendation or offer that contains a datum pertaining to a benefit for a specific receiver is disclosed in examples #9, #10 and #11 of the '87 case specification. Prompting a subscriber during the output of the mass medium program for input in respect to the recommendation or offer is disclosed in the '87 case specification page 471, second full paragraph, and pages 507 through 509. Receiving the input from the subscriber is disclosed in page 471, third full paragraph and at pages 508 through 509. Communicating the input to a remote site is disclosed at page 555, lines 19-29. Generating or assembling a message for generating a control signal is disclosed at page 471 *et seq.* particularly lines 13-33 on page 472. The delivery of specific

combined medium programming on the basis of the message is disclosed in pages 492-493, 496-498, 504-505, 508 and 552-555. In summary, Applicants respectfully submit that claim 17 is adequately described and fully enabled by the specification, and is sufficiently definite to allow one of skill to comprehend the bounds of the claimed subject matter.

The claims of the present application have been amended to further clarify the claimed invention.

Claims 2-4 and 6-17 stand rejected under 35 U.S.C. §102(e) as being anticipated by Campbell *et al.*. Applicants respectfully submit that claims 2-4 and 6-17 in the present application should be allowed because these methods are not disclosed, taught, suggested, or implied by the applied prior art of Campbell *et al.*.

The cited art of Campbell *et al.* is directed to an addressable cable television control system including a transmission from a head end of television programming and embedded data signals. (Campbell *et al.*, Abstract). The data signals can include both control signals and text signals carried in the vertical blanking interval (VBI) of a standard analog television transmission. (Campbell *et al.*, Abstract). Data signals are used to control the subscriber station converter regarding access to specific channels, programming tiers, programming subject matter and special events. The system can function as a two-way interactive communications system providing capability for pay-per-view, opinion polling, channel monitoring and information retrieval. (Campbell *et al.*, col. 3 at lines 22-26; col. 17 line 42). Individual addressable converters are controlled by the subscriber addressing control signals that control user access on the basis of

channel, tier, text, event/program code, and eligibility threshold. (Campbell *et al.*, fig. 11). The system provides for user access control by comparing channel control signal data received in a broadcast to the stored subscriber addressing signal control data. A favorable comparison or match enables reception, descrambling and display, while an unfavorable comparison results in the display of predetermined messages. Campbell *et al.*, therefore, discloses a method for (1) distribution and control of broadcast programming in a system including a head end and a plurality of addressable converters through the application of embedded VBI control signals and (2) transmission of textual programming in the VBI as an alternate programming channel to display text and graphics.

In twice amended claim 2, Applicants claim a method of processing signals at a receiver station based on at least one information transmission, the method comprising the steps of: (a) receiving some information content and a first control signal in said at least one information transmission, said information content describing one of a product and a service; (b) generating a benefit datum by processing subscriber data in response to said first control signal; (c) delivering said information content and said benefit datum at an output device at said receiver station; (d) inputting a subscriber reaction to at least one of said delivered information content and said delivered benefit datum ; (e) generating a second control signal that controls said receiver station based on said inputted subscriber reaction; and (f) controlling said receiver station based on said inputted subscriber reaction.. Claim 2, therefore, relates to a method of processing

signals at a receiver station according to a subscriber reaction to a benefit datum that was generated by processing subscriber datum in response to a received control signal.

Campbell *et al.* is said to disclose "the step of generating a benefit datum (such as stock datum) by processing subscriber datum (movies, special events, news, consumer programming, community access and religious programming, col. 1, lines 55-68) in response to" a control signal (control sources, Fig. 1). Office Action, paper no. 10, pg. 20. Claim 2, as amended, now recites the step of generating a benefit datum by processing subscriber data in response to a first control signal that had been received in at least one information transmission.

It is presumed that the examiner's "stock datum" refers to the reports on stock markets recited at col. 1, lines 60-67 as being somehow provided. Since "stock datum" was cited as a benefit datum example ("such as stock datum"), it is further presumed that the examiner considers the "almost limitless range of data" that can somehow be provided, including reports on money markets, weather reports, airline schedules, shopping directories, entertainment schedules, traffic reports, home security data emergency and first aid information and unlimited library textual information (col. 1, line 65 through col. 2, line 3), to meet the limitations of the claimed benefit datum. The movies, special events, news, consumer programming, community access and religious programming are part of cable television programming that is provided to the television consumer on a cable television system (col. 1, lines 29-35 and lines 62-65). The control sources are disclosed in Figure 1 as being input into a central data control system 12 which gathers data from a wide variety of sources and formats the data for

transmission on video frequency channels (col. 4, lines 27-30). The central data control system 12 includes a programming control system (PCS) 50. The PCS is connected to a remote computer for use in various control functions (col. 5, lines 2-4) and to local operator inputs (Fig. 2).

Campbell *et al.* fail to disclose that the "almost limitless range of data," including stock market reports, (examiner asserted "benefit datum") is generated by processing movies, special events, news, consumer programming, community access and religious programming (examiner asserted "subscriber datum") in response to the control sources (examiner asserted "control signals"). Thus, the disclosure of Campbell *et al.* fails to meet all of the limitations of claim 2.

Campbell *et al.* is said to disclose in Figure 15, elements 502 and 500 the step of generating a control signal and controlling said receiver station based on said inputted subscriber reaction. Office Action, paper no. 10, pg. 20. Amended claim 2 includes the step of generating a second control signal that controls said receiver station based on said inputted subscriber reaction. Figure 15 of Campbell *et al.* discloses a head end apparatus that includes a head end video processor 53 for combining data from PCS 50 with continuously transmitted data in different channel frequencies (col. 4, line 64 through col. 5, line 2; and col. 19, line 65 through col. 20, line 4). The data is provided by a selective data retrieval (SDR) processor 502, which in turn is driven by a screen composition system (SCS) 500 under operator programming (col. 20, lines 4-7). SDR 502 provides full-channel teletext data formatted in video line format (col. 20, lines 7-9). SCS 500 enables the preparation and input of new data to SDR 502 (col. 20, lines 14-16).

The functions of the SDR 502 and SCS 500, as discussed *supra*, and as disclosed throughout Campbell *et al.*, especially in column 19, line 46 through column 21, line 12, fail to include the generation of a second control signal that controls the receiver station based on the inputted subscriber reaction.

Applicants respectfully submit that Campbell *et al.* does not anticipate amended claim 2 since it fails to disclose every element of the claimed invention.

With regards to claim 3, Campbell *et al.* is said to disclose "the step of storing said subscriber datum at a computer (50) at said receiver station, said subscriber datum being a financial datum (stock, col. 5, lines 5-50)." Office Action, paper no. 10, page 20. The asserted computer 50 is programming control system (PCS) 50. PCS 50 generates a continuous stream of control data that contains a mixture of subscriber addressing signals and channel control signals. (col. 4, lines 64-67; and col. 12, line 63). PCS 50 is also connected by a two-way data link to a remote computer for use in various control functions (col. 5, lines 2-4). The subscriber addressing and control data from PCS 50 is input to HVP 52 on line 41 (col. 5, lines 25-27). The PCS 50 includes a control computer having both a random access memory and a read-only memory (col. 7, lines 16-19) and is connected to magnetic storage devices such as a cartridge tape data storage unit 68 and a floppy disk subsystem 70 (col. 7, lines 26-28). Campbell *et al.* does not disclose that the PCS 50 stores any of the movies, special events, news, consumer programming, community access and religious programming (examiner asserted "subscriber datum"). In fact, the PCS 50 is disclosed as only receiving input from a remote computer for use in various control functions and to local operator inputs, and is, thus, unable to receive

any of the asserted subscriber datum of Campbell *et al.*. Rather, data received from a wide variety of sources such as weather, news, stock and others is received at the central data system 12 by text formatter system 54 (col. 5, lines 5-7), not PCS 50. Applicants respectfully submit that Campbell *et al.* does not anticipate claim 3 since it fails to disclose every element of the claimed invention.

Amended claims 3 and 4 are dependent upon claim 2. As discussed *supra*, Campbell *et al.* fails to disclose every element of claim 2 and thus, *ipso facto*, Campbell *et al.* fails to anticipate claims 3 and 4. Applicants respectfully request that the relevant rejections be withdrawn.

In anticipation of claim 6, Campbell *et al.* is said to disclose the step of "receiving the instruct signal to be transmitted by the remote intermediate data transmitter station and delivering said instruct signal to the transmitter (20) (Fig. 4, col. 7, lines 40-55), said instruct signal being effective at a receiver station (40) to generate a control signal based on a subscriber reaction to a receiver specific benefit datum (Fig. 6, col. 8, lines 45-68, col. 12, lines 2-26)." Office Action, paper no. 10, pp. 21, 22. The head end station 11 and the head end signal combiner 20 are asserted as being equivalent to the claimed remote intermediate data transmitter station and transmitter, respectively. *Id.* Head end station 11 includes central data system 12 which utilizes a control computer for gathering data and formatting the data for transmission on video frequency channels (col. 4, lines 26-30). Head end signal combiner 20 receives input from two sources; the central data control system over link 18, or the television program processor 16 over link 22. Col. 4, lines 39-43. Over link 18, the combiner 20 receives dedicated data

channel transmissions. *Id.* Over link 22, the combiner 20 receives a plurality of video signals, including base band-video output (col. 4, lines 26-30 and col. 5, lines 42-45).

Amended claim 6, includes the step of delivering said at least one instruct signal to said at least one origination transmitter. Amended claim 6 includes the limitation that the instruct signal is effective at a receiver station to generate a second control signal based on a subscriber reaction to one of a recommendation and an offer that contains a receiver specific benefit datum. In Campbell *et al.*, all that is delivered to the head end signal combiner 20 (examiner asserted "transmitter") is the dedicated data channel transmissions and the plurality of video signals. The two delivered transmissions are combined by signal combiner 20 and transmitted to remote subscribers (col. 4, line 39-45). Neither of these transmissions received by the signal combiner 20 is disclosed by Campbell *et al.* to be effective at a receiver station to generate a control signal based on a subscriber reaction to a recommendation or an offer. Accordingly, Campbell *et al.* fails to meet the limitations of step (2) of claim 6.

Figure 6, column 8, lines 45-68 and column 12, lines 2-26 were cited by the examiner, presumably, to support the assertion that Campbell *et al.* does disclose an instruct signal, which had been delivered to the transmitter, being effective at a receiver station (40) to generate a control signal based on a subscriber reaction to a specific benefit datum. Office Action, paper no. 10, pp. 21, 22. Column 8, lines 45-68 refer to Figure 6, wherein an addressable converter unit 40 is shown in detail. In a one-way system, the converter 40 receives from signal combiner 20 over combined video output line 21 the dedicated data channel transmissions and the plurality of video signals (col.

8, lines 47-50). In a two-way interactive system the input to the converter 40 includes data from a two-way home terminal (col. 8, lines 52-54). In the two-way interactive system, the converter 40 is enabled to "talk back" to a two-way interactive data communications system by way of a subscriber control bus adapter 56 and the two-way home terminal 34 (Fig. 10 and col. 11, lines 56-60). Access to television programming may be restricted in a one-way system by using an intelligent converter at each subscriber location. (col. 11, line 66 to col. 12, line 5). To do so, the intelligent converter compares program codes sent from the head end station, which identify each television program, to user codes sent from the head end station identifying the access parameters of each subscriber (col. 12, lines 5-8). The extent of programming access for a remote subscriber is achieved by subscribing to a particular type of service (col. 12, lines 19-23). Amended claim 6 includes the limitation that the at least one instruct signal that had been delivered to at least one origination transmitter is effective at a receiver station to generate a second control signal based on a subscriber reaction to a recommendation or an offer. The cited figures and passages, and Campbell *et al.* in its entirety fail to disclose such a limitation. Applicants respectfully submit that Campbell *et al.* does not anticipate claim 6 since it fails to disclose every element of the claimed invention.

Amended claims 7 and 8 are dependent upon claim 6. As discussed *supra*, Campbell *et al.* fails to disclose every element of claim 6 and thus, *ipso facto*, Campbell *et al.* fails to anticipate claims 7 and 8. Applicants respectfully request that the relevant rejections be withdrawn.

With regards to claim 9, Campbell *et al.* is said to disclose the step of "receiving at a broadcast or cablecast transmitter station (11, Fig. 2) an instruct signal which is effective at the receiver station (40) to generate a control signal based on a subscriber reaction to a receiver specific benefit datum (such as stock)." Office Action, paper no. 10, pg. 22. As amended, the relevant limitation in claim 9 recites the step of receiving, at one of a broadcast transmitter station and cablecast transmitter station, an instruct signal which is effective at at least one of a plurality of receiver stations to generate a first control signal based on a subscriber reaction to a recommendation or offer that contains a receiver specific benefit datum.

In Campbell *et al.*, head end station 11 (examiner asserted "broadcast or cablecast transmitter station") receives, at central data control system 12, input from control sources, text sources, a local operator and a remote computer (Figs. 1 and 2). At television program processor 16, head end station 11 receives input from program sources (Figs. 1 and 2). Since "stock" was cited as an example of a receiver specific benefit datum ("such as stock"), it is further presumed that the examiner considers the "almost limitless range of data" that can somehow be provided, including reports on money markets, weather reports, airline schedules, shopping directories, entertainment schedules, traffic reports, home security data emergency and first aid information and unlimited library textual information (col. 1, line 65 through col. 2, line 3), to meet the limitations of the claimed receiver specific benefit datum.

Campbell *et al.* do not disclose that the input from the control sources, text sources, program sources, local operator, and remote computer (examiner asserted

"instruct signal") are in any way effective at the addressable converter 40 (examiner asserted "receiver station") to generate a control signal based on a subscriber reaction to the almost limitless range of data, including reports on money markets, weather reports, airline schedules, shopping directories, entertainment schedules, traffic reports, home security data emergency and first aid information and unlimited library textual information (examiner asserted "receiver specific benefit datum").

In column 1, line 55 through column 2, line 3, Campbell *et al.* discloses that the allocated television frequencies may transmit cable television programming that includes movies special events, news, consumer programming, community access and religious programming, and data that includes reports on stock and money markets, weather reports, airline schedules, shopping directories, entertainment schedules, traffic reports, home security data emergency and first aid information and unlimited library textual information. None of the cited examples are disclosed as presenting a recommendation or offer that contains a datum that pertains to a benefit that is specific to a particular receiver. Thus, Campbell *et al.* fails to disclose the outputting of a mass medium program that presents a recommendation or offer that contains a receiver specific benefit datum.

Campbell *et al.* is said to disclose the step of "receiving one or more control signals at said transmitter station, said control signals identifying at least one specific receiver station in which said instruct signal is addressed (col. 10, lines 1-35)." Office Action, paper no. 10, pg. 23. In Campbell *et al.*, an identity ROM 420 is connected to a microprocessor 410 of central control logic 104 of the addressable converter 40 (col. 10,

lines 17-18). ROM 420 contains data codes which uniquely identify converter 40 (col. 10, lines 18-21). These data codes do not require changing in the normal operation of the system (col. 10, lines 18-21). At the head end station 11 (examiner asserted "transmitter station"), all that is received is the input from the control sources, text sources, program sources, local operator, and remote computer. Amended claim 9 includes the step of receiving at least one first second signal at said transmitter station, said second control signal addressing said instruct signal to said processor of at least one of said plurality of receiver stations. Since all that is received at the head end station 11 is the input from the control sources, text sources, program sources, local operator, and remote computer, the examiner's "one or more first control signals" must be found within the input. Campbell *et al.* do not disclose that any of this input addresses an instruct signal, which meets the limitations of claim 9, to the converter control logic unit 104 (examiner asserted "at least one processor") of at least one specific addressable converter 40 (examiner asserted "plurality of receiver stations").

Applicants respectfully submit that Campbell *et al.* does not anticipate claim 9 since it fails to disclose every element of the claimed invention.

Amended claims 10-16 are dependent upon claim 9. As discussed *supra*, Campbell *et al.* fails to disclose every element of claim 9 and thus, *ipso facto*, Campbell *et al.* fails to anticipate claims 10-16. Applicants respectfully request that the relevant rejections be withdrawn.

With regards to claim 11, column 12, lines 1-26 are cited in the office action in support of the proposition that Campbell *et al.* discloses that "said one or more control

signals identifies two of said plurality of receiver station[s] asynchronously and each of said two receiver station[s] receive and respond to said instruct signal asynchronously."

Office Action, paper no. 10, pg. 23. Therein, it is disclosed by Campbell *et al.* that control of programming access may be effected by a one-way system using an intelligent converter at each subscriber location. The converter compares television program identification codes sent from the head end station 11 to user codes sent from the head end station that identify the access parameters of each subscriber. For restriction based on tiers of programming, system channel control signals program the addressable converter to compare the tier code of each program with the tier code of the subscriber. Campbell *et al.* compares two signals at the converter of a subscriber, the signals having been sent from the head end station. One signal identifies the transmitted program, the other signal describes the access parameters of each subscriber. It is not disclosed that either of the signals identify two of the plurality of receiver stations, the two receiver stations receiving and responding to an instruct signal as claimed. Most certainly, it is not disclosed that such identification, reception and response occurs asynchronously. Applicants respectfully submit that Campbell *et al.* does not anticipate claim 11 since it fails to disclose every element of the claimed invention.

Claim 17, as amended, includes the step of outputting a mass medium program that presents a recommendation or offer that contains a receiver specific benefit datum. In column 1, line 55 through column 2, line 3, Campbell *et al.* discloses that the allocated television frequencies may transmit cable television programming that includes movies

special events, news, consumer programming, community access and religious programming, and data that includes reports on stock and money markets, weather reports, airline schedules, shopping directories, entertainment schedules, traffic reports, home security data emergency and first aid information and unlimited library textual information. None of the cited examples are disclosed as containing or explaining data of or pertaining to a benefit that is specific to a particular receiver. Thus, Campbell *et al.* fails to disclose the outputting of a mass medium program that presents a recommendation or offer that contains a receiver specific benefit datum.

Amended claim 17 includes the step of prompting said subscriber during said step of outputting said mass medium program for input in respect of said recommendation or offer. Campbell *et al.* discloses in column 17, line 65 to column 18, line 12 a subscriber response/opinion polling feature wherein a response or opinion to questions or items being viewed are solicited. In order to do so, the subscriber tunes to a channel programmed to allow the subscriber response. This feature is not disclosed as containing or explaining any datum that is of or pertaining to a benefit for a specific receiver. Nor does this feature disclose that the solicitation for the subscriber response or opinion is in respect to a recommendation or offer that contains a receiver specific benefit datum. All that is disclosed is that the subscriber tunes to a particular channel and familiarizes himself with a transmitted program that has thereon the solicitation of opinions (col. 17, line 65 to col. 18, line 3). What is not disclosed is that the prompted input is in respect of datum that is of or pertains to a benefit for a specific receiver. Thus, Campbell *et al.* fails to meet the relevant limitation of amended claim 17.

Campbell *et al.* discloses in column 17, lines 50-64 a pay-per-view premium programming feature in which the system prints a message on the television screen requiring that a subscriber key number be entered on a keyboard in order to view a premium pay channel. When the key number is entered correctly, a converter requests that the data control system at the head end authorize reception of the premium channel. The data control system then commands the converter to allow or disallow the selected program. The converter is unable to allow output of the selected program to the subscriber until the subscriber has input the correct key number. Therefore, subscriber input occurs before the output of the selected program. Thus, the request for subscriber input is not disclosed as being during the output of a mass medium program. Also, the key number that is required by the system is in respect of a channel of pay-per-view premium programming. Thus, this feature does not disclose that the prompted input is in respect of datum that pertains to a benefit for a specific subscriber.

Amended claim 17 includes the step of delivering specific combined medium programming at said output device on the basis of said message. At page 2 of the '87 specification, there is disclosed the combination of broadcast communications media capacity with computer capacity to process and output user specific information (lines 8-11). Such a combination results in new media that include television and computers, radio and computers, broadcast print and computers, and television, computers and broadcast print (lines 25-30). The new media are called "combined' media" (lines 18-19). In Campbell *et al.*, the pay-per-view premium programming feature causes the

system to print a message on the television screen. After the correct key number has been entered, the selected program is allowed for transmission. In the subscriber response/opinion polling feature a program is transmitted which solicits opinions from the subscriber. Neither feature is disclosed as delivering combined medium programming as disclosed and claimed by Applicants'. Applicants respectfully submit that Campbell *et al.* does not anticipate claim 17 since it fails to disclose every element of the claimed invention.

Claim 5 stands rejected under 35 U.S.C. §102(e) as being anticipated Saeki *et al.*. The cited art of Saeki is directed to a CATV system in which a center transmits requested video data signals by utilizing the period of time for which no polling is carried out on the polling data channel and wherein each terminal unit reproduces pictures on a television set from the video data signals independently of ordinary television signals. In response to a request for data, video data signals corresponding to an entire category of information are distributed to the terminal units individually, and video data sufficient for a plurality of pictures is thus stored in each terminal unit. Each terminal unit is then operated to select from its stored data the particular data desired for display without the need for further communication with the CATV center.

Saeki *et al.* is said to disclose the steps of "receiving at said subscriber station (28) one or more instruct signals which are effective to generate a control signal (by 39) based on a subscriber reaction to receiver specific benefit datum (Fig. 4, col. 7, lines 29-55); [and] generating one or more subscriber specific instructions from said one or more instruct signals (col. 7, lines 1-68)." Office Action, paper no. 10, pg. 26. In Saeki *et al.*, it

is disclosed that a modulated video data signal and a subscriber address signal are received by the subscriber station 28 from center 1 (col. 6, lines 36-38 and lines 42-44 and col. 8, lines 51-53 and lines 64-67). In Figure 4, a list is shown as it is reproduced at television set 11. In order to select one of the choices from the list, a corresponding number is depressed on keyboard 44. A corresponding video coded command signal is issued by command signal generator 41-3 in data terminal controller 41 (col. 6, lines 16-17 and col. 7, lines 4-9). The command signal is provided to input B of latch 39-4 in logic controller 39 (col. 5, lines 27-31 and col. 6, lines 15-19). The command signal is received by transmitter-receiver 25 of the center 1, thereby informing the center that the subscriber wishes a data transfer from the data memory 32 to the video data memory 42.

Amended claim 5 recites the steps of receiving, at the subscriber station, at least one instruct signal which is effective to generate a control signal based on a subscriber specific reaction of the subscriber to a recommendation or an offer that contains a receiver specific benefit datum; and generating subscriber specific data of the subscriber at the subscriber station; said generating being under direction of instructions of the at least one instruct signal and at the subscriber station. Thus, the claimed instruct signals are effective to generate a control signal based on a subscriber specific reaction to a recommendation or an offer, provide the instruction that directs the generation of the subscriber specific data at the subscriber station, and are received at the subscriber station. The office action states that instruct signals are received at the subscriber station "which are effective to generate a control signal (by 39)." Presumably, the

reference "(by 39)" means that the examiner considers logic controller 39 to generate a control signal based on instruct signals that meet the claimed limitations. In Saeki *et al.*, what is received at the subscriber station is the modulated video data signal and the subscriber address signal. Neither of these signals are disclosed as being effective to generate a control signal based on a subscriber specific reaction to a recommendation or an offer or as providing instruction that directs the generation of subscriber specific data at the subscriber station. Within the subscriber station, the keyboard 44 is depressed, thereby causing the command signal generator 41-3 to issue a corresponding video coded command signal, which is input at B in logic controller 39. Also within the subscriber station, buttons on the control box 12 are pushed in order to apply a control signal representative of a selected channel to the logic controller (col. 5, lines 36-45). Thus, the logic controller receives the video command signal and the control signal of the control box 12. Both of these signals are generated from *within* the subscriber station. Claim 5 recites that the instruct signals that are effective to generate a control signal are *received* at the subscriber station. Assuming *arguendo* that the video command signal from keyboard 44 and the control signal from control box 12 are received at the subscriber station, Saeki *et al.* fails to disclose that either of these signals are effective to generate a control signal based on a subscriber specific reaction to a recommendation or an offer or as providing instruction that directs the generation of subscriber specific data at the subscriber station. Thus, Saeki *et al.* fails to meet the limitation of receiving at the subscriber station instruct signals which are effective to generate a control signal based on a subscriber specific reaction of the subscriber to a recommendation or an

offer; and generating subscriber specific data of the subscriber at the subscriber station, the generating at the subscriber station directed by instructions from the instruct signals

Applicants respectfully submit that claim 5 in the present application should be allowed because these methods are not disclosed, taught, suggested, or implied by the applied prior art of Saeki *et al.*.

Claims 18 stands rejected under 35 U.S.C. §102(b) as being anticipated Block *et al.*. Applicants respectfully submit that claims 18 in the present application should be allowed because these methods are not disclosed, taught, suggested, or implied by the applied prior art of Block *et al.*.

The cited art of Block *et al.* is directed to a method and system for subscription television billing and access. Block discloses a subscription television system and method for billing a viewer for programs actually viewed. Block teaches combining scrambled audio and video, a scramble code and a program code into a scrambled program signal which is transmitted to a subscriber station. The subscriber station routes the scrambled program signal to an unscrambler and to a control and storage unit, with the unscrambler operating in response to control signals from the control and storage unit. The control and storage unit detects the code signals for unscrambling and billing purposes, detects the scramble code and compares it to a separately supplied scramble code, and stores the program code of a particular program being viewed.

Block *et al.* is said to disclose the step of "receiving a first control signals (ACC) and one of video (SVID) and audio (SAUID) in said one or more broadcast or cablecast

transmissions (Fig. 4, col. 3, lines 25-39)." Office Action, paper no. 10, pg. 27. In Block *et al.*, an unscrambled audio and video program signal (UPROG) is received from a conventional sources, such as television camera equipment. at program signal scrambler 14 (col. 3, lines 37-40 and col. 5, lines 51-53). At the program signal receiver 22 of subscriber station equipment 12, a scrambled program signal (SPROG) is received via conventional broadcast or cable techniques (col. 3, lines 34-36 and 62-64). The scrambled program signal is comprised of scrambled audio (SAUD) and video (SVID) signals and a transmitted scramble code (TSC) (col. 3, lines 44-49). At the subscriber station equipment 12, a subscriber control unit 30 (also referred to as "program select and accept control", col. 6, lines 55-56) provides for the application of an accept signal (ACC) to a control and storage unit 26 (col. 6, lines 55-58). Block *et al.* fails to disclose that the ACC signal (examiner asserted "first control signal") is received in broadcast or cablecast transmissions. Rather the ACC signal is produced by the subscriber control unit 30 of the subscriber station equipment 12. Accordingly, Block *et al.* fails to meet the relevant limitation of claim 18.

Block *et al.* is said to disclose the step of generating information by processing subscriber data in response to said first control signal (RSC) (Fig. 4, element 26)." Office Action, paper no. 10, pg. 27. Figure 4 of Block *et al.* illustrates the reception of the scrambled program signal at tuner 56 of the subscriber station equipment 12. The SPROG includes the scrambled video signal which in turn contains the video information, program code and the scramble code (col. 6, lines 44-52). The code detector 64 detects the received scramble code (RSC) and program code in the

scrambled video signal (col. 6, lines 66-68). The received scrambled code (RSC) is supplied to a scramble code comparator 66 (col. 7, lines 1-2) wherein the RSC is compared to a stored scramble code signal (SSC) previously received from the signal storage device 68. According to the comparison, unscramble control signals (VCS' and ACS') are generated (col. 7, lines 5-8) which are used to reconstitute the scrambled video and audio signals (col. 7, lines 8-12). Block *et al.* fails to disclose that the received scramble code (RSC) serves as the basis for processing data that pertains to a subscriber in order to generate information. Furthermore, Block *et al.* fails to disclose that the received scramble code (RCS) is in broadcast or cablecast transmissions, as recited in step (a) of claim 18. Also, the received scramble code (RCS) and the accept signal (ACC) have been referenced in concert to satisfy the limitations of the claimed "first control signal." It is respectfully submitted that the examiner has improperly used a plurality of elements from Block *et al.* to anticipate the limitations of a single claimed element (the first control signal). Accordingly, Applicants request that the rejection of claim 18 as anticipated by Block *et al.* be withdrawn.

Applicants respectfully submit that claim 18 in the present application should be allowed because these methods are not disclosed, taught, suggested, or implied by the applied prior art of Block *et al.*.

Applicants respectfully submit that each of the pending claims clearly contains elements or an element absent in the cited references, therefore, precluding a rejection under 35 U.S.C. § 102. Applicants respectfully request that the rejections of the pending claims be withdrawn, and that all claims be permitted to issue.

As to the rejection in office action paragraphs 10-15 of Applicants' claims under non-statutory, non-obvious type double patenting, Applicants traverse the Examiner's double patenting rejection on three separate grounds which are set forth in the reply brief of Serial No. 08/113,329 (Atty. Docket No. 05634.008), incorporated herein by reference. For the sake of brevity, these arguments will not be set forth herein; the Examiner is respectfully directed to the above-mentioned reply brief.

The claims in the present application are distinct from the claims in the Harvey patents. As previously mentioned, the Office Action states that the independent and distinct standard was the main factor in the Schneller court's determination that the double patenting rejection should be affirmed. The Office Action has misinterpreted this phrase. This phrase means independent 'or' distinct. MPEP (6th ed.) § 802.01. The MPEP defines independent as meaning "that there is no disclosed relationship between the two or more subjects disclosed" and that they are not connected. The MPEP defines the term distinct as meaning that "two or more subjects disclosed are related . . . but are capable of separate manufacture, use, or sale as claimed . . ." Two or more subjects cannot then be unrelated, independent, and also related, and thus distinct. Analyzing the PTO's cited representative claims referenced in the Office Action, the claims of the present application are clearly distinct from the claims in the patents and therefore the claims in the present application are patentable. Although not required, applicants will analyze the claims of the present application with respect to the designated representative claims of Harvey U.S. Patents 4,694,490 and 4,704,725.

Claim 5 of the present application is distinct from the first representative claim, claim 7 of U.S. Patent 4,694,490

Patent 4,694,490, claim 7 claims a method of communicating television program material, said material including a video signal containing a television program and an instruct-to-overlay signal, to multiple receiver stations. The video signal is received and the instruct-to-overlay signal detected and processed by a computer. The computer generates and transmits its overlay video signals to a television receiver which presents a combined display of the television program and overlay video signals, said display being specific to a particular user.

Present application claim 5, as amended, relates a method of communicating subscriber specific data from a subscriber station to a remote station. The method includes the steps of storing subscriber data at the subscriber station; receiving at the subscriber station instruct signals which are effective to generate a control signal based on a reaction of the subscriber to a recommendation or an offer; generating subscriber specific data at the subscriber station according to instructions from the instruct signals; receiving the subscriber's reaction to the recommendation or the offer; and transferring the subscriber specific data from the subscriber station to the remote stations based on the reception of the reaction.

Patent claim 7 does not cover present application claim 5. Patent claim 7 relates to instruct-to-overlay signals that are processed by a computer and received by a television receiver which presents a combined display of the instruct-to-overlay signal and a television program. Application claim 5 relates to communicating subscriber

specific data from a subscriber station to a remote station based on a subscriber's reaction to a recommendation or an offer, the subscriber specific data generated according to instruction from instruct signals that had been received at the subscriber station and are able to generate a control signal based on the subscriber's reaction to the recommendation or the offer. The two claims are capable of separate manufacture, use, and sale as claimed and, as such, these two inventions are distinct.

U.S. patent 4,694,490, claim 7

In a method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay video signals, to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay video signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, and wherein a video signal containing a television program signal and an instruct to-overlay signal are transmitted to said receiver stations, the steps of:
receiving said video signal at a plurality of receiver stations and displaying said program material on the video receivers of selected ones of said plurality of receiver stations
detecting the presence of said instruct-to-overlay signal at said selected receiver

Present application, claim 5 (as amended)

A method of communicating subscriber specific data of a subscriber from a subscriber station of said subscriber to at least one remote station, said method comprising the steps of:
(1) storing subscriber data of said subscriber at said subscriber station;
(2) receiving at said subscriber station at least one instruct signal which is effective to generate a control signal based on a subscriber reaction of said subscriber to one of a recommendation and an offer, each one of said recommendation and said offer containing a receiver specific benefit datum;
(3) generating, under direction of instructions of said at least one instruct signal, at said subscriber station, said subscriber specific data;
(4) receiving said subscriber reaction to said one of said recommendation and said offer at said subscriber station;
(5) transferring said subscriber specific data from said subscriber station to said at least one remote station based on said step of receiving said subscriber reaction.

stations at a time when the corresponding overlay is not being displayed, and coupling said instruct-to-overlay signal to the computers at said selected receiver stations, and causing the computers at said selected receiver stations to generate and transmit their overlay video signals to their associated television receivers in response to said instruct-to-overlay signal, thereby to present a combined display at the selected receiver stations consisting of the television program and the related computer generated overlay, the overlays displayed at a multiplicity of said receiver stations being different, with each display specific to a specific user.

Claim 5 of the present application is distinct from the second representative claim, claim 3 of U.S. Patent 4,704,725

Patent 4,704,725, claim 3 claims a method of communicating output signals comprising data and user specific signals at a multiplicity of receiver stations from computers to output devices. At least some of the computers can modify the user specific signals by processing modification control signals. The computers communicate the data and user specific signals in response to a received and detected instruct-to-transmit signal.

Present application claim 5, as amended, relates a method of communicating subscriber specific data from a subscriber station to a remote station. The method includes the steps of storing subscriber data at the subscriber station; receiving at the subscriber station instruct signals which are effective to generate a control signal based

on a reaction of the subscriber to a recommendation; generating subscriber specific data at the subscriber station according to instructions from the instruct signals; receiving the subscriber's reaction to the recommendation; and transferring the subscriber specific data from the subscriber station to the remote stations based on the reception of the reaction.

Patent claim 7 does not cover present application claim 5. Patent claim 7 relates to instruct-to-overlay signals that are processed by a computer and received by a television receiver which presents a combined display of the instruct-to-overlay signal and a television program. Application claim 5 relates to communicating subscriber specific data from a subscriber station to a remote station based on a subscriber's reaction to a recommendation, the subscriber specific data generated according to instruction from instruct signals that had been received at the subscriber station and are able to generate a control signal based on the subscriber's reaction to the recommendation. The two claims are capable of separate manufacture, use, and sale as claimed and, as such, these two inventions are distinct.

<u>U.S. patent 4,704,725, claim 3</u>	<u>Present application, claim 5 (as amended)</u>
A method of communicating data to a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to	A method of communicating subscriber specific data of a subscriber from a subscriber station of said subscriber to at least one remote station, said method comprising the steps of: (1) storing subscriber data of said subscriber at said subscriber station; (2) receiving at said subscriber station at least one instruct signal which is effective to generate a control signal based on a subscriber reaction of said subscriber

accommodate a special user application, comprising the steps of: transmitting an instruct-to-transmit signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device; detecting the presence of said instruct-to-transmit signal at selected receiver stations and coupling said instruct-to-transmit signal to the computers associated with said selected stations, and causing said last named computers to generate and transmit their user specific signals to their associated output devices in response to said instruct-to-transmit signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.

to one of a recommendation and an offer, each one of said recommendation and said offer containing a receiver specific benefit datum;

(3) generating, under direction of instructions of said at least one instruct signal, at said subscriber station, said subscriber specific data;

(4) receiving said subscriber reaction to said one of said recommendation and said offer at said subscriber station;

(5) transferring said subscriber specific data from said subscriber station to said at least one remote station based on said step of receiving said subscriber reaction.

Claim 5 of the present application is distinct from the third representative claim, claim 24 of U.S. Patent 4,965,825

Patent 4,965,825, claim 24 claims a method of generating user specific output information at a multiplicity of receiver stations. Each receiver station is programmed with a special user application and has a computer adapted to generate user specific output information. Each receiver station has an output device to which its computer transmits a user specific signal. At a time when the user specific output information does not exist, an instruct-to-generate signal is transmitted to the receiver stations. In response to the instruct-to-generate signal, the computers generate and transmit to the

output devices the user specific output information in user specific signals which are different, "with each output signal specific to a specific user".

Present application claim 5, as amended, relates a method of communicating subscriber specific data from a subscriber station to a remote station. The method includes the steps of storing subscriber data at the subscriber station; receiving at the subscriber station instruct signals which are effective to generate a control signal based on a reaction of the subscriber to a recommendation; generating subscriber specific data at the subscriber station according to instructions from the instruct signals; receiving the subscriber's reaction to the recommendation; and transferring the subscriber specific data from the subscriber station to the remote stations based on the reception of the reaction.

Patent claim 7 does not cover present application claim 5. Patent claim 7 relates to instruct-to-overlay signals that are processed by a computer and received by a television receiver which presents a combined display of the instruct-to-overlay signal and a television program. Application claim 5 relates to communicating subscriber specific data from a subscriber station to a remote station based on a subscriber's reaction to a recommendation, the subscriber specific data generated according to instruction from instruct signals that had been received at the subscriber station and are able to generate a control signal based on the subscriber's reaction to the recommendation. The two claims are capable of separate manufacture, use, and sale as claimed and, as such, these two inventions are distinct.

In a method of generating computer output at a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific output information content and user specific signals to one or more associated output devices, with at least one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify said computers' method of processing data and generating output information content, each of said computers, being programmed to accommodate a special user application, the steps of: transmitting an instruct-to-generate signal to said computers at a time when corresponding user specific output information content does not exist, and causing said last named computers to generate their user specific output information content in response to said instruct-to-generate signal, thereby to transmit to each of their associated output devices an output information content and the user specific signal of its associated computer, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.

A method of communicating subscriber specific data of a subscriber from a subscriber station of said subscriber to at least one remote station, said method comprising the steps of:

- (1) storing subscriber data of said subscriber at said subscriber station;
- (2) receiving at said subscriber station at least one instruct signal which is effective to generate a control signal based on a subscriber reaction of said subscriber to one of a recommendation and an offer, each one of said recommendation and said offer containing a receiver specific benefit datum;
- (3) generating, under direction of instructions of said at least one instruct signal, at said subscriber station, said subscriber specific data;
- (4) receiving said subscriber reaction to said one of said recommendation and said offer at said subscriber station;
- (5) transferring said subscriber specific data from said subscriber station to said at least one remote station based on said step of receiving said subscriber reaction.

Claim 5 of the present application is distinct from the fourth representative claim, claim 15 of U.S. Patent 5,109,414

Patent 5,109,414, claim 15 claims a signal processing system which receives data from a data source and outputs the data to a matrix switch and a detector, control signals are detected within the received data and stored for further processing, and a

processor controls the directing functions of (1) the matrix switch which receives the data as input and can direct selected portions of the data to a data transmission means and (2) the device which stores and transfers the control signals to the processor.

Present application claim 5, as amended, relates a method of communicating subscriber specific data from a subscriber station to a remote station. The method includes the steps of storing subscriber data at the subscriber station; receiving at the subscriber station instruct signals which are effective to generate a control signal based on a reaction of the subscriber to a recommendation; generating subscriber specific data at the subscriber station according to instructions from the instruct signals; receiving the subscriber's reaction to the recommendation; and transferring the subscriber specific data from the subscriber station to the remote stations based on the reception of the reaction.

Patent claim 7 does not cover present application claim 5. Patent claim 7 relates to instruct-to-overlay signals that are processed by a computer and received by a television receiver which presents a combined display of the instruct-to-overlay signal and a television program. Application claim 5 relates to communicating subscriber specific data from a subscriber station to a remote station based on a subscriber's reaction to a recommendation, the subscriber specific data generated according to instruction from instruct signals that had been received at the subscriber station and are able to generate a control signal based on the subscriber's reaction to the recommendation. The two claims are capable of separate manufacture, use, and sale as claimed and, as such, these two inventions are distinct.

U.S. patent 5,109,414, claim 15

In a signal processing system,
a receiver/distribution means for receiving data from a data source and for outputting said data to a matrix switch means and a control signal detector means,
a matrix switch means for receiving said data from said receiver/distributor means and for directing selected portions of said received data to a data transmission means,
a control signal detector means for detecting control signals respecting said data and transferring said control signals to a storage/transfer means, said control signal means being configured to detect said control signals at a predetermined location within said data,
a storage/transfer means for receiving and storing said control signals and for transferring at least a portion of said control signals to a processor means for further processing, and
a processor means for controlling the directing functions of said matrix switch means and the transfer functions of said storage/transfer means based on instructions contained in said control signals.

Present application, claim 5 (Amended)

A method of communicating subscriber specific data of a subscriber from a subscriber station of said subscriber to at least one remote station, said method comprising the steps of:
(1) storing subscriber data of said subscriber at said subscriber station;
(2) receiving at said subscriber station at least one instruct signal which is effective to generate a control signal based on a subscriber reaction of said subscriber to one of a recommendation and an offer, each one of said recommendation and said offer containing a receiver specific benefit datum;
(3) generating, under direction of instructions of said at least one instruct signal, at said subscriber station, said subscriber specific data;
(4) receiving said subscriber reaction to said one of said recommendation and said offer at said subscriber station;
(5) transferring said subscriber specific data from said subscriber station to said at least one remote station based on said step of receiving said subscriber reaction.

Paragraph 10 of the Office Action states that "determination of a possible non-statutory double patenting rejection obvious-type in each of the related 327 applications over each other will be deferred until a later time." (Office Action, p. 12 at lines 3-6). Applicants submit that the Examiner and the PTO cannot defer further rejections to a later time. Every ground of rejection should be made in examiner's first Office Action.

Title 37 of the CFR states that “[o]n taking up an application for examination . . . the examiner shall make a thorough study thereof and shall make a thorough investigation of the available prior art relating to the subject matter of the claimed invention. The examination shall be complete with respect to both compliance of the application . . . with the applicable statutes and rules and to the patentability of the invention as claimed, as well as with respect to matters of form, unless otherwise indicated.” 37 CFR § 1.104(a). The MPEP states “[t]he examiner’s action will be complete as to all matters, except that in appropriate circumstances, such as misjoinder of invention, fundamental defects in the application, and the like, the action of the examiner may be limited to such matters before action is made.” MPEP § 707.07, quoting 37 CFR § 1.105. Finally, “[p]iecemeal examination should be avoided as much as possible. The examiner ordinarily should reject each claim on all valid grounds available . . . Where a major technical rejection is proper, it should be stated with full development of reasons rather than by mere conclusion coupled with some stereotyped expression.” MPEP §707.07(g).

Applicants submit that the Examiner has a duty to give each application a complete examination, that rejections be made with specificity, and that deferred rejections are not allowed. For these reasons, Applicants likewise traverse the rejection based on the “judicially created doctrine of double patenting over the claims of copending U.S. application 08/113,329 and the following [list of all applicants copending applications].” Applicants submit that this rejection, even if appropriately made with specificity, should be a provisional double patenting rejection. Applicants respectfully request that this rejection be withdrawn.

As to the paragraph numbered 3, Applicants acknowledge their duty to maintain a line of patentable demarcation between related applications. Assuming *arguendo* that substantially duplicate claims exist, the Applicants intend to make a good faith effort to alert the PTO of any instances in which the PTO treats such claims inconsistently.

As to the paragraph numbered 4, Applicants acknowledge and appreciate the Examiner's concern over the use of alternative claim language. Applicants believe that the disclosure supports every possible embodiment or permutation that can be created using said language. During the prosecution of this application, Applicants intend to ensure that the disclosure supports each possible embodiment as claimed using alternative claims.

As to the paragraph related to the multiplicity rejection in parent file 07/096,096, Applicants submit that the PTO gave a multiplicity rejection in this case and limited Applicants to twenty-five claims. Roughly one hundred claims had been originally filed. There was no substantive review of any of the other claims outside of the twenty five. Applicants were not permitted to submit additional claims although a request was made. The disclosure of Applicants address too many subject areas to be adequately covered by a small number of claims. Applicant submit that "nexis" analysis is not required by Applicants.

As to the paragraph 25, applicants acknowledge and appreciate the interviews provided by the PTO. Applicants also appreciate the detailed description of the interviews provided in the Office Action. The Office Action states that "the Group would like to have a complete grouping of applications in a manner that was submitted

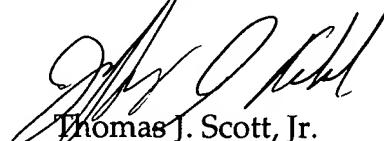
earlier for only a portion of the total filings." Applicants note that based on the Office Actions received thus far, the PTO does not appear to be following the groupings applicants submitted previously. The order of examination of applicants' applications do not seem to have any correspondence to the groupings previously submitted. Applicants, therefore, will not supply further groupings. Applicants will, however, gladly supply further groupings if requested by the PTO for the purpose of following these groupings. Mr. Groody has confirmed in a telephone conversation between Mr. Groody and Mr. Scott that no more groupings need be sent.

In the interest of maintaining a clear record, Applicants respectfully traverse the Office Action's interview summary statement that an offer was made to terminally disclaim the present application with the '81 or '87 patents. Rather, applicants respectfully submit that their offer was to disclaim a block of copending applications against one another, provided their issue date was in close enough proximity so as not to result in unnecessarily great losses in patent term duration.

In accordance with the foregoing it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot. Further, that all pending claims patentably distinguish over the prior art, taken in any proper combination. Thus, there being no further outstanding objections or rejections, the application is submitted as being in a condition for allowance, which action is earnestly solicited.

If the Examiner has any remaining informalities to be addressed, it is believed that prosecution can be expedited by the Examiner contacting the undersigned attorney for telephone interview to discuss resolution of such informalities.

Respectfully submitted,

 Reg #
32,680

Date: June 6, 1997
HOWREY & SIMON
1299 Pennsylvania Avenue, NW
Washington, D.C. 20004
Tel: (202) 383-6614

Thomas J. Scott, Jr.
Reg. No. 27,836
Attorney for Applicants